Forest Service Climate-Ready

Forests, grasslands, and people are key parts of preparing for and responding to climate change.

- Helping forests and grasslands adapt to a changing climate
- Practicing carbon stewardship
- Working with partners to reach common goals

Forest Service

Pacific Northwest Research Station

June 2015

The U.S. Forest Service and *Climate Change*

Facing the Conservation *Challenge of the 21st Century*

Restoring degraded lands to help sustain supplies of clean water, wildlife habitat, wood, and recreational opportunities.

- **Assessing** current risks, vulnerabilities, policies, and gaps in our knowledge.
- **Engaging** partners in finding solutions.
- **Managing for** resilience in ecosystems, as well as human communities through: adaptation, mitigation, and sustainable strategies.

What Are We Doing?

- **Retaining** forests and grasslands
- **Restoring** ecosystem health
- **Reforesting** degraded lands

What Can You Do?

- **Ask Questions**
  Visit: www.fs.fed.us/climatechange/advisor
- **Take Action**
  Plant native trees and vegetation, conserve water and energy, and recycle. Become involved in your community to build collaborative responses to climate change.

Climate is what you *expect* Weather is what you *get*

Weather is the day-to-day state of the atmosphere, and its short-term effects such as temperature or precipitation.

Climate is the general long-term weather trend of a particular area over 30 years or more.

Scientific research has shown that increasing greenhouse gases from human activities are influencing our climate, leading to warmer temperatures, changes in precipitation, and creating challenges for the management of our forests and grasslands.

How does climate change affect forests and grasslands?

- **Rising temperatures** and longer droughts increase the risk for more frequent and larger wildfires.
- **Invasive insects** will likely become more severe with warmer temperatures, becoming a bigger threat to trees and crops.
- Many of these effects may lead to **habitat loss** and changes in water flow and quality.

USDA

The Power of One *Tree*

Imagine What a Forest Can Do

Carbon dioxide is an important greenhouse gas and a major contributor to climate change. Trees reduce atmospheric carbon dioxide by storing the carbon in their trunks, roots, and branches, helping to mitigate carbon emissions. By the time a tree turns 40 years old, it can store a ton or more of carbon.

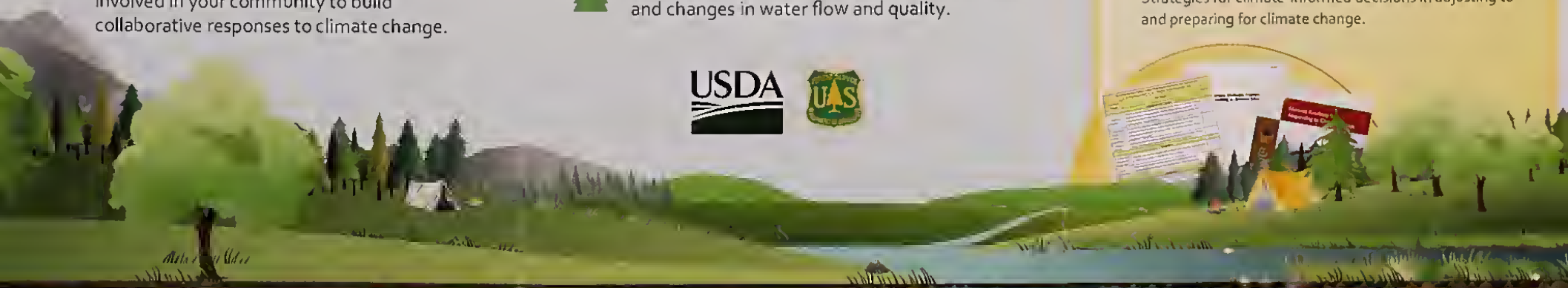
Just imagine what millions of trees can do to help clean up carbon emissions!

Healthy forests also provide wood products, clean water, wildlife habitat, and beautiful places for rest, relaxation, and fun!

Find out more about our efforts at

www.fs.fed.us/climatechange/advisor

- **Forest Service Climate Change Performance Scorecard:** Tracks our accomplishments and plans to improve organizational capacity, public engagement, adaptation, and mitigation.
- **Strategic Framework for Responding to Climate Change:** Supports our mission to sustain healthy forests and grasslands for future generations.
- **Roadmap for Responding to Climate Change:** Strategies for climate-informed decisions in adjusting to and preparing for climate change.



Helping forests and grasslands adapt to a changing climate

Managing the nation's forests and grasslands to enhance **ecosystem health, sustainability,** and **resilience**.

Conducting research on climate change impacts and management solutions.

Preparing for and **responding to disturbances** including wildfire, insects, drought, and extreme weather events.

Practicing carbon stewardship

Helping forests **capture and store carbon** by keeping them healthy and resilient in a changing climate.

Reducing our environmental footprint by improving energy efficiency, using bio-based materials, and reducing water use, among other efforts.

Promoting the use of wood as a green building material.

Working with partners to reach common goals

Coordinating with State, Tribal, private forest, and grassland owners to better respond to climate change.

Collaborating with universities, other agencies, and environmental organizations to advance research and development.

Developing tools and **educational resources** for managers, land owners, and communities.

Connecting with the public and youth through our **conservation education** programs.

Climate Change
Let's Get Ready!

By combining the best-available science and management practices to keep forests and grasslands healthy for future generations, the U.S. Forest Service is Climate-Ready and wants you to be too!

Forest Service Facts

- We manage 193 million acres of national forests and grasslands. That's more area than the state of Texas!
- We provide scientific knowledge, tools and assistance to Tribes, States, private landowners, and international governments to foster climate-informed, sustainable land management.
- Our internationally recognized scientists are leading experts in the effects of climate change on the Nation's forests, grasslands, rangelands, and urban ecosystems.

Read more about the Forest Service climate change response

www.fs.fed.us/climatechange/advisor

Learn more about forests and grasslands at our Climate Change Resource Center

www.fs.fed.us/ccrc

This brochure was created in collaboration with the Climate Change Advisor's Office, the Northern Institute of Applied Climate Science (NIACS), State and Private Forestry, and the Northern Research Station.